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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/760,320	01/21/2004	Takao Isogai	084335-0181	7661		
22428 75 FOLEY AND LA	590 01/30/200 ARDNER LLP	7	EXAMINER			
SUITE 500 3000 K STREET	NIW	MARTINELL, JAMES				
WASHINGTON	-		ART UNIT	PAPER NUMBER		
			1634			
SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE			
3 MON	THS	01/30/2007	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	<u> </u>	2	
,		Application No.	Applicant(s)
Office Action Summary		10/760,320	ISOGAI ET AL.
	Office Action Summary	Examiner	Art Unit
		James Martinell	1634
Period fo	The MAILING DATE of this communication aportion or Reply	opears on the cover sheet w	ith the correspondence address
WHI0 - Exte after - If N0 - Failt Any	CHEVER IS LONGER, FROM THE MAILING [ensions of time may be available under the provisions of 37 CFR 1 r SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period ure to reply within the set or extended period for reply will, by statu reply received by the Office later than three months after the mailined patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNION (1.136(a). In no event, however, may a side will apply and will expire SIX (6) MONUTE, cause the application to become Al	CATION. reply be timely filed VTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
Status			•
1)⊠	Responsive to communication(s) filed on 25	October 2006.	
2a)⊠	This action is FINAL . 2b) ☐ Th	is action is non-final.	
3)	Since this application is in condition for allow closed in accordance with the practice under	•	·
Disposit	tion of Claims		
5)□ 6)⊠ 7)□	Claim(s) 1 and 5-8 is/are pending in the application of the above claim(s) is/are withdrest Claim(s) is/are allowed. Claim(s) 1 and 5-8 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and	awn from consideration.	
Applicat	tion Papers		
-	The specification is objected to by the Examir		
10)⊠	The drawing(s) filed on 21 January 2004 is/ar		
	Applicant may not request that any objection to the		
11)[Replacement drawing sheet(s) including the correl The oath or declaration is objected to by the I	•	
Priority	under 35 U.S.C. § 119		
•	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority docume		§ 119(a)-(d) or (f).
	2. Certified copies of the priority docume		Application No
	3. Copies of the certified copies of the pr	•	received in this National Stage
	application from the International Bure	•	A servering d
*	See the attached detailed Office action for a list	st of the certified copies not	received.
		•	•
Attachme	nt(s)		
	ice of References Cited (PTO-892)		Summary (PTO-413)
3) Info	ice of Draftsperson's Patent Drawing Review (PTO-948) rmation Disclosure Statement(s) (PTO/SB/08) ler No(s)/Mail Date		(s)/Mail Date Informal Patent Application

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 and 5-7 are are rejected under 35 U.S.C. 102(b) as being clearly anticipated by GenBank® Accession No. AC008736 (September 27, 2000). GenBank® Accession No. AC008736 has 92.7% sequence identity to SEQ ID NO: 102 (see the alignment below). Thus, GenBank® Accession No. AC008736 is embraced by the claims (*e.g.*, see Claim 1(f) and (g)). Since the DNA was sequenced, it was necessarily contained within a vector and host cell. This rejection is repeated for reasons already of record (*e.g.*, Office action mailed June 2, 2006, pages 5-10). Applicants' arguments (response filed October 25, 2006, pages 10-11) are most unconvincing. SEQ ID NO: 2290 is encoded by nucleotides 858-1562 of SEQ ID NO: 102 (see the alignment below). GenBank® Accession No. AC008736 matches SEQ ID NO: 102, nucleotides 858-1562 except for one mismatch at nucleotide 1187 in SEQ ID NO: 102 (see the alignment below). SEQ ID NO: 102, nucleotides 1185-1187 (cga) encode arginine as do GenBank® Accession No. AC008736, nucleotides 128,245-128,247 (cgg). Thus, the nucleic acid of GenBank® Accession No. AC008736 is embraced by the claims. Watson et al (*The DNA Story*, 1981 W.H. Freeman and Company, New York, page 547) is cited here to show that both cga and cgg encode arginine.

RESULT 3 AC008736/c LOCUS AC008736 191925 bp DNA linear PRI 27-SEP-2000 DEFINITION Homo sapiens chromosome 19 clone CTD-2538C1, complete sequence. ACCESSION AC008736 AC008736.6 GI:10312244 VERSION KEYWORDS HTG. Homo sapiens (human) SOURCE ORGANISM Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae; Homo. REFERENCE (bases 1 to 191925) AUTHORS DOE Joint Genome Institute and Stanford Human Genome Center. TITLE Direct Submission JOURNAL Unpublished (bases 1 to 191925) REFERENCE DOE Joint Genome Institute. AUTHORS TITLE Direct Submission Submitted (03-AUG-1999) Production Sequencing Facility, DOE Joint JOURNAL

```
Genome Institute, 2800 Mitchell Drive, Walnut Creek, CA 94598, USA
REFERENCE
          (bases 1 to 191925)
        DOE Joint Genome Institute and Stanford Human Genome Center.
 AUTHORS
 TITLE
        Direct Submission
 JOURNAL
        Submitted (27-SEP-2000) DOE Joint Genome Institute, 2800 Mitchell
        Drive, Walnut Creek, CA 94598, USA
COMMENT
        On Sep 27, 2000 this sequence version replaced gi:8575905.
        Draft Sequence Produced by DOE Joint Genome Institute
        www.jgi.doe.gov
        Finishing Completed at Stanford Human Genome Center.
        www-shqc.stanford.edu
        Quality: Phrap Quality >=40 99.9% of Sequence;
        Estimated Total Number of Errors is 0.1.
        STS Content:
        SHGC-57769 G37408.
FEATURES
               Location/Qualifiers
               1. .191925
   source
               /organism="Homo sapiens"
               /mol type="genomic DNA"
               /db xref="taxon:9606"
               /chromosome="19"
               /clone="CTD-2538C1"
ORIGIN
                        Score 2892.8; DB 8; Length 191925;
 Query Match
                  92.7%;
 Best Local Similarity
                  99:9%;
                        Pred. No. 0;
 Matches 2894; Conservative
                       0; Mismatches
                                       Indels
                                              0;
                                                       0:
Qy
        1 ACTAGAGGTGGGGTTAGCGCTTGGAAGCACCGACCAACGTGAGCGCAACGCGGCAGGGAC 60
          129460 ACTAGAGGTGGGGTTAGCGCTTGGAAGCACCGACCAACGTGAGCGCAACGCGGCAGGGAC 129401
Db
Qу
        61 ACCTGACCCCGGCGGCGCCCAGCCCCTCGGATTGCCAGTCACTGCTCGCTTTGGGGCACG 120
          129400 ACCTGACCCCGGCGCGCCCCAGCCCCTCGGATTGCCAGTCACTGCTCGCTTTGGGGCACG 129341
Db
       121 GAGGTGCCCAGTCCTGCGGGGCACCCGACGTCCTGTCGCCGACAGGGTCCGGGAGTCAGT 180
Qy
          129340 GAGGTGCCCAGTCCTGCGGGGCACCCGACGTCCTGTCGCCGACAGGGTCCGGGAGTCAGT 129281
Db
       181 ATAGCTGGGTTCTAGTCCCATCACAGGCAAAAACTCCGCGGGAGCCTGGCCCGCTTTTTA 240
Qу
          129280 ATAGCTGGGTTCTAGTCCCATCACAGGCAAAAACTCCGCGGGAGCCTGGCCCGCTTTTTA 129221
Db
       241 CCTGGGCCTCAGTTTCCCCATCCGTAAAATAGAACGGGTTGGATCTCCCGAGCGCTAACA 300
Qу
          Db
     129220 CCTGGGCCTCAGTTTCCCCATCCGTAAAATAGAACGGGTTGGATCTCCCGAGCGCTAACA 129161
       Qу
          Db
       Qу
          Db
       421 GTGGGCGGTCCTAGGAAACCCTACCGGCCGCCCTTGGCAGCGCCTAAGGCGGAĢCGCG 480
Qy
          129040 GTGGGCGGTCCTAGGAAACCCTACCCGGCCGCCCTTGGCAGCGCCTAAGGCGGAGCGCG 128981
Db
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Qу	481	CGGCTCTGCAGCCTGCTTGCCCCGGAGTTGGCACCCACGGAGGATGGGGACCGCACCCTC	540
Db	128980	CGGCTCTGCAGCCTGCTTGCCCCGGAGTTGGCACCCACGGAGGATGGGGACCGCACCCTC	128921
Qу	541	AGCTTCGCAGGGAGCCACCGTGGAGGCCAGGGCGGTGCAGAGACACGACGTGTGACTCGG	600
Db	128920	${\tt AGCTTCGCAGGGAGCCACCGTGGAGGCCAGGGCGTGCAGAGACACGACGTGTGACTCGG}$	128861
Qу	601	AGTGCGCCTGGGGAGGATGGACGAGGGAGCGGGGACCGCTAACGGGGCTCCCTCTGCGC	660
Db	128860	AGTGCGCCTGGGGAGGATGGACGAGGGAGCGGGGGACCGCTAACGGGGCTCCCTCTGCGC	128801
Qу	661	GCCCCGTCCGCAGAGGCGCACGTCGAGGGTCCCGGGCGGCTCCGTGGACGTTGGCGGTA	720
Db	128800	GCCCGTCCGCAGAGGCGCACGTCGAGGGTCCCGGGCGGCTCCGTGGACGTTGGCGGTA	128741
Qу	. 721	GCGCCGAGCGAGCCATGAAGAGCGTTCGTGCCGCGCGCCCAAGGCCGGGATG	780
Db	128740	GCGCCGAGCCATGAAGAGCGTTCGTGCCGCGCGCCCAAGGCCGGGATG	128681
Qy		GGGGTTAGCCACATCCTGCCGCGCTGAGGGGGAGGCTAACGGGCGGG	840
Db		GGGGTTAGCCACATCCTGCCGCGCTGAGGGGAGGCTAACGGGCGCCGGGCCCC	128621
Qy	841	${\tt AGCCGGAGCCCACCGCGATGGCGAGGGAGGAGTGCAAGGCGCTGCTGGACGGGCTCAACA}$	900
Db	128620	AGCCGGAGCCCACCGCGATGGCGAGGGAGGAGTGCAAGGCGCTGCTGGACGGGCTCAACA	128561
Qy	901	${\tt AGACGACTGCGTGCTACCACCACCTGGTGCTGACCGTCGGTGGCTCGGCGGACTCGCAGA}$	960
Db	128560	AGACGACTGCGTGCTACCACCACCTGGTGCTGACCGTCGGTGGCTCGGCGGACTCGCAGA	128501
Qу	961	ACCTGCGGCAGGAGCTGCAAAAGACGCCCCAGAAGGCGCAGGAGCTGGCGGTGTCCACCT	1020
Db	128500	ACCTGCGGCAGAAAGACGCGCCAGAAGGCGCAGGAGCTGGCGGTGTCCACCT	128441
Qу	1021	GCGCCCGGCTGACTGCTGCTGCCGCCGACCGGGCCTGGCCGCCGACGAGCCCCGAGT	1080
. Db	128440	GCGCCCGGCTGACTGCTGCTGCGCGACCGGGGCCTGGCCGACGACGACGAGT	128381
Qy.	1081	TCGAGCGGCTCTGGGTGGCCTTCTCGGGCTGCCTGGACCTGCTGGAAGCGGACATGCGAC	1140
Db	128380	TCGAGCGGCTCTGGGCCTTCTCGGGCTGCCTGGACCTGCTGGAAGCGGACATGCGAC	128321
Qу	1141	GCTCGCTGGAGCTGGGCGCCGCGTTCCCGCTGCACGCGCGGCGACCGCTGGTGCGCA	1200
Db	128320		128261
Qу	1201	CAGGTGTGGCGCCTCCTCCGGCGTGGCGCGCGCGCGCGCG	1260
Db	128260	CAGGTGTGGCGCGCCTCCTCCGGCGTGGCGCGCGCGCGCG	128201
Qу	1261	GGCTCGAGGCGGAGGCGACTTCGACGTCGCGGACCTGCGGAGCTGGAGCGCGAGGTCC	1320
Db	128200		128141
Qу	1321	TTCAGGTGGGCGAGATGATCGACAACATGGAGATGAAGGTCAACGTGCCCCGCTGGACCG	1380
Db	128140	.	128081

Qу	1381	TGCAAGCCCGGCAGGCGGCGGCGCCGAGCTCCTGTCCACGGTCAGCGCCGGCCCCTCCT	1440
Db	128080	TGCAAGCCCGGCAGGCGGGGGGCGCCGAGCTCCTGTCCACGGTCAGCGCCGGCCCCTCCT	128021
Qy	1441	$\tt CGGTCGTGTCCTTGCAGGAGCGCGGGGGGGGGTTGCGACCCCAGGAAGGCCCTGGCCGCCA$	1500
Db	128020	CGGTCGTGTCCTTGCAGGAGCGCGGGGGGGGGGTTGCGACCCCAGGAAGGCCCTGGCCGCCA	127961
Qу	1501	$\tt TCCTTTTCGGCGCCGTGCTGCCGGGCGGGGGGGGGGGG$	1560
Db	127960	TCCTTTTCGGCGCCGTGCTGCCGGCGCTGTGCCGTGTGCGTGCGAAGCTGA	127901
Qу	1561	GCTGACAGACACCCGACGCCGCCTGCTGCTGCCGCTCCCTCAGAAAAGACTCGG	1620
Db	127900		127841
Qу	1621	GATGGGTGTGGGCTCTGGCCTGTGCAAGGGGAGTGGTCCTAAAACCCCGTGTGTGCATGG	1680
Db	127840	GATGGGTGTGGGCCTGTGCAAGGGGAGTGGTCCTAAAACCCCGTGTGTGCATGG	127781
Qу	1681	GTACACGCGCGTTTCCAGTGCACATCTGCCTGGGCAGGACACGGTTTTCCTCTTGCTGGC	1740
Db	127780	GTACACGCGCGTTTCCAGTGCACATCTGCCTGGGCAGGACACGGTTTTCCTCTTGCTGGC	127721
Qу	1741	CCGGGAGAAGTTAACTTTGCGCCGGCCGTCAGGGCATTACCGCTAACGTCTGCAGGAGCT	1800
Db	127720	CCGGGAGAAGTTAACTTTGCGCCGGCCGTCAGGGCATTACCGCTAACGTCTGCAGGAGCT	127661
Qу	1801	TTATTCCCTATTAATAGAAAACCGTCACAGTGACCCTAGATCCCTCCGAGTTAATGAGTT	1860
Db	127660	TTATTCCCTATTAATAGAAAACCGTCACAGTGACCCTAGATCCCTCCGAGTTAATGAGTT	127601
Qу	1861	AACACATGTGCTGTTGGGGCGTCTTTACAGGGAGTCCGAGTTCGGTGCCCACCCCTGCCA	1920
Db	127600	AACACATGTGCTGTTGGGGCGTCTTTACAGGGAGTCCGAGTTCGGTGCCCACCCCTGCCA	127541
Qу	1921	GCGTCGCCCCTTTCTGCGTGGGACAGTTTGAAAAGGTGGGTG	1980
Db	127540	${\tt GCGTCGCCCCTTTCTGCGTGGGACAGTTTGAAAAGGTGGGTG$	127481
Qу	1981	GAGAGGACGCTGTTTGGTTCTATGTGGTTGGTCTGTTTCCCGGACAAGAAAATTGCAA	2040
Db	127480	GAGAGGGACGCTGTTTGGTTCTATGTGGTTGGTTTCCCGGACAAGAAAATTGCAA	127421
Qу	2041	TCAAATGTCAGCAGCTTTTATTACCTTAATCTTTCAGGGCCTAAATTTAGGAGAGTGTCC	2100
Db	127420	TCAAATGTCAGCAGCTTTTATTACCTTAATCTTTCAGGGCCTAAATTTAGGAGAGTGTCC	127361
Qу	2101	TGAGAGCAGTTCATACAAAGGGCTTTCTCTAAGACGCGCTACAGCCCTTCCTAGCAGAGT	2160
Dþ	127360	TGAGAGCAGTTCATACAAAGGGCTTTCTCTAAGACGCGCTACAGCCCTTCGTAGCAGAGT	127301
Qу	2161	TTATCCATTCGTCCCCAAGAGCAGCTAGAAGAGATTTGAGGTCATGACCTCCCACTGCCG	2220
Db	127300	TTATCCATTCGTCCCCAAGAGCAGCTAGAAGAGATTTGAGGTCATGACCTCCCACTGCCG	127241
Qу	2221	CTCAGGGGCTGACCCTATTTAGGAAACCAAAGAGGGTGGGT	2280
Db	127240	CTCAGGGGCTGACCCTATTTAGGAAACCAAAGAGGGTGGGT	127181

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Qу
    2281 TTGGATCCAGTGCGCACACTTGCCTGCGGAAAAGGGCTCTCCCCAGCCACCCGGAGATGG 2340
       127180 TTGGATCCAGTGCGCACACTTGCCTGCGGAAAAGGGCTCTCCCCAGCCACCCGGAGATGG 127121
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       127120 GGGTAAGAGGAAGAGCAGAGGCTTGGGGTAGGGCCACCTGGTGTTTAAACAGGCACTTTC 127061
Db
    2401 TCCTTCTCTGGGGCTTATTTTTGTTCAGAACTAGACCAGAGTGTTTGAACCTCCTTTGCA 2460
Qу
       127060 TCCTTCTCTGGGGCTTATTTTTGTTCAGAACTAGACCAGAGTGTTTGAACCTCCTTTGCA 127001
Db
    Qy
       Db
   Qу
       Db
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Qу
       126880 GGTAATGTGGCATTACTGGCCCACAGAGGTTTTGAGCCAATCAGCTCTGAGACTGGGTTA 126821
Db
    2641 GAATGTAACAGCTTTAACTTGGGATTTAAGAAGCTTTTAAAAGGTAATAATCCTCTGAAA 2700
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       126820 GAATGTAACAGCTTTAACTTGGGATTTAAGAAGGTTTTTAAAAGGTAATAATCCTCTGAAA 126761
Db
Qу
    2701 GAAAAATGACGTAACCACAGCGTGTACTATGAAAGCTGTTATTTTAATAAAGAACGCTGG 2760
       126760 GAAAAATGACGTAACCACAGCGTGTACTATGAAAGCTGTTATTTTAATAAAGAACGCTGG 126701
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Db
    Qу
       Db
    2881 TCTTTTTTGAGGCAGG 2896
Qу
       Db
   126580 TCTTTTTTGAGACAGG 126565
```

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over GenBank[®] Accession No. AC008736 (September 27, 2000) in view of applicants' admitted state of the prior art (*e.g.*, page 82, first full paragraph). GenBank[®] Accession No. AC008736 has 92.7% sequence identity to SEQ ID NO: 102. Applicants acknowledge the expression of nucleic acids in heterologous host cells to be old (*e.g.*, instant application at page 82, first full paragraph). It would have been obvious for one of ordinary skill in the

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art at the time the invention was made to express the nucleic acid of GenBank[®] Accession No. AC008736 in the admittedly old manner in order to produce large amounts of sequence-specific polypeptide. This rejection is repeated for reasons already of record (*e.g.*, Office action mailed |June 2, 2006, page 10). The discussion in the rejection under 35 U.S.C. § 102(b) is incorporated here.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Martinell whose telephone number is (571) 272-0719.

The examiner works a flexible schedule and can be reached by phone and voice mail.

Alternatively, a request for a return telephone call may be e-mailed to james.martinell@uspto.gov. Since e-mail communications may not be secure, it is suggested that information in such requests be limited to name, phone number, and the best time to return the call.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla, can be reached on (571) 272-0735.

OFFICIAL FAX NUMBER

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any Official Communication to the USPTO should be faxed to this number.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

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For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

James Martinell, Ph.D. Primary Examiner

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